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FUNCTIONAL EXPRESSION OF G PROTEIN-COUPLED RECEPTORS WITH ALTERED LIGAND BINDING AND/OR COUPLING PROPERTIES

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Abstract

Modified forms of G protein-coupled receptors which display altered ligand binding and/or coupling properties are provided as well as cells expressing such receptors and assays utilizing these cells for screening and identifying pharmaceutically effective compounds that specifically modulate the activity of a these modified forms of G protein coupled receptors. Yeast or mammalian cells can be used to express such receptors. The subject assays enable rapid screening of large numbers of compounds (e.g., compounds in a library) to identify those which are receptor agonists or antagonists. Compositions of matter, such as these novel receptors, novel recombinant yeast cells and novel gene constructs, are also provided. The instant assays provide a convenient format for discovering compounds which can be useful in modulating cellular function, as well as in understanding the pharmacology of compounds that specifically interact with these modified forms G protein coupled receptors.